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SPRINT COMMUNICATIONS COMPANY L.P.
6391 SPRINT PARKWAY
MAILSTOP: KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

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| EXAMINER |
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SHINGLES, KRISTIE D

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| ART UNIT | PAPER NUMBER |
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2141

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|----------------------------------------|------------|---------------|
| 3 MONTHS | 03/21/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/034,012

Applicant(s)

PARKER ET AL.

Examiner

Kristie Shingles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14,15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14,15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

*Applicant has not amended any claims.
Claims 1, 3-12, 14, 15 and 17 are pending.*

Response to Arguments

I. In view of the Appeal Brief filed on 11/27/2006, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is a non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendment, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

II. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

IV. **Claims 1, 3-9, 12, 14-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Xu et al* (US Publication 2002/0114322) in view of *Sultan* (US 7,058,973).**

a. **Regarding claims 1, 12, and 15, *Xu et al* teach a method, central server, and server software for connecting at least two users to exchange network packets via an internetwork, each user being addressable within said internetwork at a respective global address, and wherein some users of said internetwork are connected to said internetwork via a respective network address translation (NAT) firewall; said method comprising the steps of:**

- maintaining in a central server coupled to said internetwork a database of registered users, said database including respective addresses corresponding to said registered users (*page 4 paragraph 0045-0049—each client is registered with a proxy server, NAT server maintains a translation table of registered users' address data and directory server maintains mapping of each registered client with its respective proxy server*);
- receiving a call request from a calling user to establish a connection to exchange network packets with a called user, at least said called user being a registered user (*pages 4-5 paragraph 0051*);

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- detecting whether a respective NAT firewall is in place between said called user and said internetwork (*page 2 paragraphs 0014 and 0017-0018, page 8 paragraph 0098*);
- if a respective NAT firewall is not in place between said called user and said internetwork, then: transmitting said called user's respective address to said calling user; and said calling user establishing a network session for said connection with said called user by transmitting to said called user's respective address (*page 2 paragraph 0017 and 0019—provision for no NAT firewall between first client and internetwork and establishment of session with second client using client's network address and port number*); and
- if a respective NAT firewall is in place between said called user and said internetwork (*page 2 paragraph 0018*), then: detecting whether a respective NAT firewall is in place between said calling user and said internetwork (*page 2 paragraph 0017, 0019 and 0021*); and if a respective NAT firewall is not in place between said calling user and said internetwork, then: transmitting said calling user's respective address to said called user; and said called user establishing a network session for said connection with said calling user by transmitting to said calling user's respective address (*page 2 paragraph 0017, 0019 and 0024-0025, page 5 paragraph 0056—provision for no NAT firewall between second client and internetwork and establishment of session with second client by obtaining the second client's network address and port number*).

Xu et al teach provisioning communication between users behind NAT firewalls and translating private addresses to public addresses for communication over the Internet (*pages 1-2 paragraphs 0013-0022, page 4 paragraphs 0045-0047, page 5 paragraphs 0061 and 0064*), yet fails to explicitly teach that the respective address of the first and second clients are “global addresses”. However, global/public addresses are inherent features of Network Address Translation (NAT)—which involves the conversion of private addresses locally used within a LAN into global addresses usable for communicating across the Internet with communication requests issued from the LAN. *Sultan* discloses the use of global addresses in NAT (*col.2 line 35-col.3 line 11*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Xu et al* with *Sultan* for the purpose provisioning communication between users located behind NAT firewalls using the users' global address; because it allows for the establishment of communications between users of separate private network by implementing well-known network address translation functions without compromising the privacy of the network.

b. **Regarding claims 3, 14, and 17,** *Xu et al* with *Sultan* teach the method of claim 1, 12, and 15 further comprising the steps of: if a respective NAT firewall is in place both between said called user and said internetwork and between said calling user and said internetwork, then relaying through said central server all packets exchanged between said calling user and said called user during said connection (*Xu et al: pages 2-3 paragraphs 0021-0024, page 4 paragraph 0049, page 8 paragraph 0091*).

c. **Regarding claim 4,** *Xu et al* with *Sultan* teach the method of claims 1 further comprising the step of: receiving respective activation messages from each of said registered users at times when they become available for connecting to other users (*Xu et al: page 5 paragraphs 0055-0056*).

d. **Referring to claim 5,** *Xu et al* with *Sultan* teach the method of claim 4 wherein a presence of a NAT firewall is detected after receiving said respective activation messages, and wherein said database stores data indicating whether said respective NAT firewall is detected for each respective active user or not (*Xu et al: col.4 lines 0046-0048; Sultan: Figures 4-6, col.6 lines 38-55, col.13 line 61-col.15 line 2*).

e. **Regarding claim 6**, *Xu et al* with *Sultan* teach the method of claim 5 wherein said central server transmits periodic messages to each respective active user for which a NAT firewall is detected in order to maintain an open network session (*Xu et al*: pages 4-5 paragraphs 0049-0061, page 7 paragraphs 0077-0082, page 8 paragraphs 0091-0092; *Sultan*: col.5 line 26-col.6 line 29).

f. **Referring to claim 7**, *Xu et al* with *Sultan* teach the method of claim 1 wherein said central server transmits periodic messages to each respective active user in order to maintain an open network session with each respective active user (*Xu et al*: pages 4-5 paragraphs 0049-0061, page 7 paragraphs 0077-0082, page 8 paragraphs 0091-0092; *Sultan*: col.5 line 26-col.6 line 29).

g. **Regarding claim 8**, *Xu et al* with *Sultan* teach the method of claim 1 wherein said respective NAT firewalls translate between a respective global address of a respective user and a respective local equipment address of said respective user, wherein each of user, and wherein said firewall detecting step is comprised of comparing said respective global address and said respective local equipment address, a NAT firewall being detected when said respective global address and said respective local equipment address do not match (*Xu et al*: pages 2 paragraphs 0018).

h. **Referring to claim 9**, *Xu et al* with *Sultan* teach the method of claim 1 wherein said respective global addresses each include an IP address and port number (*Xu et al*: page 5 paragraphs 0061-0062; *Sultan*: col.2 line 35-col.3 line 11).

VI. **Claims 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Xu et al* (US Publication 2002/0114322) in view of *Sultan* (US 7,058,973) in further view of *Liu et al* (US 6,993,012).

i. **Regarding claim 10**, *Xu et al* with *Sultan* teach the method of claim 1 as applied above, yet fail to further teach wherein said database further includes a respective telephone number associated with each registered user, and wherein said call request identifies said called user by a respective telephone number. However, *Liu et al* teach a directory server and database that maintains the telephone number and IP address associated with each user (*Figures 1 and 3, col.7 lines 10-48*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Xu et al* and *Sultan* with *Liu et al* for the purpose maintaining the connection addresses (i.e. telephone numbers and IP address) of users communicating via Internet telephony for effecting communication with other users in the LAN or over the Internet.

j. **Referring to claim 11**, *Xu et al* and *Sultan* with *Liu et al* teach the method of claim 10 wherein a telephone call is established over a public switched telephone network between said calling user and said called user simultaneously with said connection for exchanging network packets (*page 7 lines 24-48*).

Conclusion

VI. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: *Liu et al* (6,928,082), *Bakke* (7,100,202), *Yamakawa et al* (7,003,798).

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VII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER